

REMARKS

This is in response to the Office Action of October 20, 2010. The features of dependent claims 9, 13, 24, and 45 are incorporated into independent claim 35. Claims 9, 12, 13, 24, and 45 are accordingly cancelled, without prejudice. No new matter is introduced by this Amendment. Claims 2, 4-8, 10, 11, 14-23, 27-31, 35-44, and 46-49 are now pending in this application.

Cornec and Wen

Claims 9 and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 99/35193 (Le Cornec) in view of US 2003/0024437 A1 (Wen). Office Action, pages 12-13. Claim 9 has been cancelled. This ground of rejection was not applied to claims 13, 24, or 45. Since claim 35 hereinabove now includes the features of claims 13, 24, and 45, this ground of rejection does not apply to claim 35 in its present form.

**APPLICANTS' INVENTION DIFFERS SIGNIFICANTLY
FROM THE BECKNER TECHNOLOGY**

In US 3,758,376 (Beckner) – which is the primary reference in the prior art rejections discussed below – the amount of filler is lower than in the present invention, but the stock consistency is higher than in the present invention. In Beckner, the amount of filler is 15% (column 4, line 20), while in the present invention it is 20-50%. In Beckner, the stock consistency is 30 g/l (column 4, line 1: “3 % suspension of photographic grade sulfite and kraft wood fibers”), while in the present invention the stock consistency is 3-20 g/l.

Another significant difference between the photographic paper in Beckner and the printing paper provided by the present invention is that the basis weight per square meter is 170 g/m² in Beckner (column 4, line 19), while it is typically lower in printing papers. As can be seen in Tables V and VI in Applicants' specification, the basis weight in Applicants' examples is lower than 100 g/m².

Basis weight has an influence on retention in the papermaking process. The lower the basis weight, the weaker the mechanical retention is, and the more the retention must be assisted

chemically. Retention in the manufacture of printing papers is clearly a bigger problem than is retention in the manufacture of photographic papers. Furthermore, basis weight also has an influence on production speed. The higher the basis weight, the lower the driving speed. A thick web makes water removal more difficult and therefore decreases the driving speed.

To summarize, retention in the manufacture of photographic paper is not a significant problem. It was not a problem which the Beckner technology had to solve.

When a person of ordinary skill in the art tries to improve retention during web formation in paper manufacture, he or she would not have any reason to consider the Beckner technology. Beckner does not teach anything about retention.

In Beckner, there is no reference to improving retention by using colloidal material. In fact, Beckner teaches that colloidal material improves light scattering (page 1, column 2, lines 24-33: “the electrically surface charged colloidal material is known to increase the light scattering efficiency of the titanium pigments”). In the examples of Beckner, retention improvement cannot be seen either, since the sheets were produced by recirculating “white-water” through the sheet, thereby forcing the filler to retain to the web. Beckner teaches that “Retention of the filler and other additives was substantially complete, since the “white-water” was circulated.” Column 4, lines 22-24, emphasis added. Beckner thus concludes that by recirculating the white-water, the retention can be completed. In practice, this procedure cannot be followed in paper manufacture, where the retention must be successful in one cycle, so that the mineral fines retain on the wire (“first pass retention”).

Since a person of ordinary skill in the art would not look at Beckner to improve the retention in paper manufacture, he or she also has no reason to look to the secondary references. All of the rejections based upon Beckner in combination with one or more secondary references lack sustainable basis in fact.

Beckner and Keiser

Claims 2, 4, 7, 8, 11, 14-24, 27-31, 35-38, 42, 43, and 45-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Beckner reference discussed above in view of US 2001/0030032 A1 (Keiser). Office Action, pages 5-8. Claims 24 and 45 have been cancelled. This ground of rejection was not applied to claims 9 or 13. Since independent claim 35

hereinabove now includes the features of claims 9 and 13, this ground of rejection does not apply to the listed claims in their present form.

Beckner and Keiser and Wen

Claims 6, 10, and 40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Beckner and Keiser in view of Wen. Office Action, pages 8-9. This ground of rejection was not applied to claims 9, 13, 24, or 45. Since independent claim 35 hereinabove now includes the features of claims 9, 13, 24, and 45, this ground of rejection does not apply to claims 6, 10, and 40 in their present form.

Beckner and Keiser and Neivandt

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Beckner and Keiser in view of US 2005/0150621 A1 (Neivandt). Office Action, pages 9-10. This ground of rejection was not applied to claims 9, 13, 24, or 45. Since independent claim 35 hereinabove now includes the features of claims 9, 13, 24, and 45, this ground of rejection does not apply to claim 5 in its present form.

Beckner and Keiser and Lunden

Claims 9 and 39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Beckner and Keiser in view of US 6,887,351 B1 (Lunden). Office Action, pages 8-9. This ground of rejection was not applied to claims 13, 24, or 45. Claim 9 has been cancelled. Since independent claim 35 hereinabove now includes the features of claims 13, 24, and 45, this ground of rejection does not apply to claim 39 in its present form.

Beckner and Keiser and Werner

Claims 12 and 44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Beckner and Keiser in view of US 2,992,962 (Werner). Office Action, page 11. Claim 12 has been cancelled. This ground of rejection was not applied to claims 9, 13, 24, or 45. Since independent claim 35 hereinabove now includes the features of claims 9, 13, 24, and 45, this ground of rejection does not apply to claim 44 in its present form.

Beckner and Keiser and Wen and Werner

Claims 13 and 41 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Beckner and Keiser and Wen and Werner. Office Action, pages 11-12. Claim 13 has been cancelled. This ground of rejection was not applied to claims 9, 24, or 45. Since independent claim 35 hereinabove now includes the features of claims 9, 24, and 45, this ground of rejection does not apply to claim 41 in its present form.

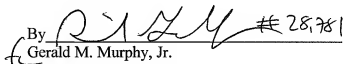
Conclusion

Applicants respectfully submit that none of the rejections of record is sustainable with respect to any of claims 2, 4-8, 10, 11, 14-23, 27-31, 35-44, and 46-49 now present in this application. Therefore, withdrawal of the rejections – and passage of this application to Issue – are earnestly solicited.

If there are any remaining issues in the present application, the Examiner is respectfully requested to contact Richard Gallagher, Registration No. 28,781, at (703) 205-8008 to conduct an interview in an effort to expedite prosecution in connection with the present application.

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Respectfully submitted,

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